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SURGICAL LECTURES,

DELIVERED BY

MR. ABERNETHY.

Theatre, St. Bartholomew's Hospital.

LECTURE 10.

Irritative Inflammation.

GENTLEMEN,

I am about to call your attention this evening to a species of inflammation, which I describe as the irritative; but I do not know whether I am right or not in making the distinction, you must judge of it for yourselves; it is what the surgeons have called *Erysipelas*.

It is necessary, then, to trace the history of erysipelas, to know whether the distinction be properly marked, and whether it can be properly supported.

There is an inflammation which is remarkably disposed to produce mortification; it is an inflammation which is red and painful, frequently occasioning the death of the part which it attacks. I say, also, that it is progressive in many instances; it comes on in fits, and produces a great deal of sloughing; it subsides a little, after an interval it comes on again, and the part perishes. Now I say that this should not be called erysipelas, which is a disease that is much diffused, and it has no definite margin. It may produce sloughing, yet it is rare to find sloughing in that inflammation, which I should call *distinct erysipelas*.

I say that the same disease produces extensive mortification, especially in the legs, and I shall have to give you a history of this mortification, when I shall speak presently on that subject. Inflammation shall come on, a patch of mortification occurs near the ancle, the part sloughs; the inflammation returns again, and another part sloughs, and this extends up the limb. It is an inflammation varying in its nature, but very painful, which is extremely prone to terminate in mortification; and I believe it may, and ought to be contradistinguished from erysipelas.

There are many inflammations of a constitutional nature which do not terminate in mortification. Now I question whether what they call erysipelatous sore throat, ought to be called so; it is a painful sore, not diffused, not spreading, not travelling about like erysipelas.

The inflammation of which I am speaking sometimes attacks absorbent glands, as those in the groin, and comes on so violently as to produce a degree of irritative fever; the gland becomes excessively irritable; if you touch it with the finger, he shrinks away. It is very painful; his pulse becomes very quick, his skin hot, the secretions are checked, and he is in that state which I have before described as the *irritative fever*. There is great prostration of strength, the patient cannot sleep, his bowels are irregular, and so on. Well, you apply a bread and water poultice, he lies in bed, you use means to tranquillize him, and he gets better. The parts become indolent; the bubo may suppurate, and there is nothing extraordinary in that; he gets well, and goes about. It is nonsense to say that this irritation is the result of suppuration in the glands.

The more you attend to disease, the more you will be convinced, that it is the state of the constitution that determines the character of local disease; and that local disease may be also traced as the cause of bringing on a

proportionate constitutional derangement. A kind of corresponding constitutional derangement is produced, and I have already given you examples of this in the history of phlegmonous inflammation; I said, that when the inflammation was phlegmonous, there was inflammatory fever; a bold and decided fever, attended with a consciousness of strength; but the minute the secretion is established, this irritation is relieved, and there is a cessation of all the fever. When the wound has been discharging properly, when the distension is taken off from the surrounding parts, when the parts are flabby about the wound, when the patient has become weak, relaxed, and debilitated, ah! there is a kind of inflammation produced, which they call erysipelas. I might call it irritative inflammation if I chose. As soon as this state of things happens, then there is irritative fever. I call the inflammation in the cyst of a lumbar abscess irritative inflammation. Has any man a right to call this erysipelas, I would ask? While this kind of irritative inflammation continues, there is irritative fever, which frequently terminates in hectic.

I say that the character of the inflammation very much depends on the state of the constitution, and we have accordingly either a decided development of heat, and a quickness of the pulse, if the inflammation be active; if it be of the nature of phlegmon, we have a sneaking, disguised sort of fever; if the inflammation be of a low and weak kind, are not the sanguiferous and secerning systems disturbed? How can these be so, but through the nervous energy. The local irritation produces, by this means, a general disturbance of the whole frame; the sanguiferous, secerning, and nervous systems are all disturbed, and nothing is going on right; the tongue is furred, the liver does not secrete, the bowels are constipated, and the skin is hot. They will call all this uproar *fever*.

Now all these things have I seen, and I say that this sort of inflammation may be tranquillized, or it may be roused to suppuration. It does not necessarily terminate in mortification, although, when excessive, it is very liable to do so. I know the foible of my own mind; you may call it what you please—fancy, theory, speculation, or any thing you like; but what is it? Why, it is an honest endeavour to try to find out the nature of things by continued observation, and so on. Call it, I say, what you please; imagination, fancy, or speculation; it may have led me to think as I do, and what I think I say; that there is not only some sort of disturbance *locally*, but I say that there is a disturbance also *generally*. It is that sort of inflammation which Mr. HUNTER described as *violent* inflammation, with little power, and it is what I shall call *irritative* inflammation. I can say no more about it, and I shall, in the next place, go on to speak of

Erysipelas.

You will see how far the distinction which I have made can be supported. Now, as to this said *erysipelas*, we can only describe it where we see it on the surface of the body. The skin is red, as red as can be; you touch it with your finger, and it is pale in a minute; it seems to be an inflammation of the minute vessels only, the larger arteries not partaking of the inflammation; and there seems to be no impediment to the transmission of the blood from the arteries to the veins, for there is none of that resistance which you meet with in phlegmon. There is increased secretion too going on, totally unlike what happens in phlegmon. You know the subjacent parts are œdematous; there is no defined margin, no circumscription of the disease, no adhesions to check its progress, and it is disposed to spread; egad, it is a travelling disease, and, as I say, the parts are disposed to swell.

I remember a man who was attacked by this sort of inflammation in his leg, it travelled up that leg, up that side of his body, crossed over his chest, and went down the other side even to his toes, and then, you know, it could go no farther. One part was attacked by the inflammation, as it ceased in the adjacent part. I think, then, that it deserves to be called a travelling disease; it may be said to do this by continuity of surface; but it seems sometimes to jump about from one part to another, and this is what they have called a *metastasis*, or a

translation of the disease. Erysipelas sometimes comes on without any local excitement, as if it were from constitutional causes; this I shall call *medical erysipelas*. At other times it comes on from local excitement; something teases and provokes the part to inflammation, and this I call *surgical erysipelas*.

Now, as to the Medical Erysipelas, I will tell you what the Doctors say about that, they say you had better not meddle with it at all; you may powder it a little if you please, but do not attempt to repel it; for if you do, you will have it affect some other part, perhaps some affection of a vital organ may take place. Now this is true enough, for if you try to drive it away, if you put on your cold washes, or play any of your surgical tricks, why you have a metastasis, as they call it, and the man dies.

You cannot suppose that there is an erysipelatous inflammation to be found in the brain. Oh! no, there s no such thing, but you may say that there is the *mort de la tête*, the *mort des pneumons*, or the *mort du cœur*, if you please. This repulsion produces sometimes suffocation, and then is there any difficulty in accounting for it? why, I should think not; the man dies, in that case, for want of breath.

The occurrence of erysipelas shows something very wrong about a man's health; let something be applied to provoke a part a little, let there be an increased action produced, and in a healthy man you will have a phlegmon; you will have none of this sneaking inflammation, which I am now telling you about. The general health was distnrbed before, the functions of the digestive organs were disordered; the person has nausea, and loss of appetite, and the actions of the different parts are not healthy;—and that settles it. It is produced by the state of the general health, and it acts upon the general health. I should put a little bread and water poultice on the part, and try to soothe the disturbance which has been produced.

But, as to Surgical Erysipelas, this is what we have most to do with, and here there are many things to be done; but the principal one is to do away with the causes, on the part of the constitution, which have produced this peculiarity of local inflammation. But oh! what are they? I should be glad to ask, who can tell? But if I do not know exactly the state of the part which produces this peculiar inflammation, I know the state that the constitution is in, and on what that state principally depends. (I am never afraid to speak what is in my mind, and I think I am right; but if I am wrong I shall be very happy to have my errors pointed out and corrected.) I'll be hanged if erysipelas is not always the result of a disordered state of the digestive organs. I never see it come on if the digestive organs be right, and it goes away as soon as they are put right. Now what is the medical practice? They powder the part a little, and they give bark, and so on. But what else has been done? It is not I alone who am so mad as you may think me, in saying that erysipelas depends upon the causes I have mentioned; there are others who think much the same, there is RICHTER, the German surgeon: they do not say that he is crazy too, I should think. He says that it arises from a *gastric irritation*. DESSAULT, a French surgeon, says, that it is the result of a *bilious cause*, and he has recommended tartar emetic. I do not know what they mean by the gastric irritation and the bilious affection, but I know that there is a peculiarity of the general health on which the disease very much depends, and that it is wrong to repel it. For whenever a disease comes on locally, without immediate injury, it is, as it were, a fixation of the constitutional disease; it is a focus in which the diseased action is to be concentrated; and, if it be seated in an unimportant part, in the name of God, let it go on there. When you come to consider the essential nature of local disease, you will find that it is essentially modified by changes in the general health. Well; this erysipelas often occurs in persons who have gout and rheumatism, but would you repel it in them? I recollect a fine, healthy, good, honest fellow, who had an attack of erysipelas in his hand, (indeed he was a servant of mine,) and not liking this inflammation about his hand, he plunged it into cold water; he was soon after seized with insensibility, he

fell down in a state of torpor, and soon afterwards died. Many brains and lungs have I examined after persons have died of this metastasis, but were there any traces of inflammation in these organs of an erysipelatous kind? Oh! no, it could not be expected. Well, I say it is the result of some previous *irritation* in the *digestive organs;* but what it is, or how to put it to rights, I do not know. Oh! if I could but put all the disorders of the digestive organs to rights I should discover a better thing than the philosopher's stone. (A laugh.)

When the animal and vegetable matter does not digest which gets into a man's stomach, they produce there great irritation, and the secretions of the intestinal canal, and of the liver, become disordered. The only way to get rid of this irritation, is to clear out all this stuff. I know of nothing better than to excite the action of the liver gently, and not tease and irritate the stomach and bowels; you want to get rid of an irritation, and not create one by teasing and worrying a man's guts out. If the man have a dryness of the skin, you may give him a little antimony; but it is horribly absurd to be cramming a man with physic. I say it is horribly absurd, and I have no patience to hear and see what I do, as if medicine could cure a disease. Now what are medicines? They are the means which we employ to correct faulty actions in the various functions of the body.

Going, one day, round the hospital, I saw a patient who had an ulcerated leg, as if it had been of ten years' standing. What do you call this? I asked. Oh! said the dresser, it is a case of erysipelas, and he only came in last week. Good God, said I, is it possible? True, I assure you, sir, the leg has sloughed, and that has made it in the state in which you see it. I was induced to ask the patient what his previous health had been, and when the complaint first appeared. He said that it came about a fortnight before, first in his throat, and he could not swallow; then the pain went into his loins, and he could not walk; his appetite became bad, and his bowels wrong, very wrong. And then, sir, said he, it fell into my legs. Here is a very distinct case. Well, I said, you must take care not to offend the stomach, keep the bowels regular, and apply something soothing to the part. Oh! Lord, what an excellent thing that is, not to offend the stomach, but if this be attended to, and the parts kept tranquil, the patient will generally come round, if there be no inveterate disease.

To return to erysipelas; it is said to terminate in mortification; but, upon my life, it is a very rare occurrence, as I think. It is a question, whether the inflammation of which I was first speaking, and which terminates so readily in mortification, ought not to have a different name, and this is the point with which I set out. Erysipelas may go away again: Does it ever suppurate? I should like to know that. All I can tell you is, that the inflammation which takes place under the erysipelatous part is very often followed by suppuration, but whether erysipelas itself does suppurate or not I cannot tell.

Here I have been in the habit of selecting a case which is intended to show the principal circumstances of the disease as I have described it. It was the case of a gentleman who was a pupil here; and a finer, handsomer, fellow I never saw in my life, the present company always excepted. (A good laugh.) He went into the army, and afterwards was with Sir John Moore at Corunna; there he shared in the misfortunes of his countrymen, and before his health was perfectly restored, he was ordered to Walcheren. Attacked there by the fever which was so destructive, and which was followed, even in those who recovered, by great disorder of the digestive organs. In many cases which I had the opportunity of examining, abscesses in the liver and spleen were found, and in others, disease in the digestive organs quite enough to kill them. He recovered however from the effects of the fever and went into the country. About a year and half or two years after, he came to London on some regimental business, and stopped at a coffee house in St. James's-street. He was laid up there by a low attack of fever, and erysipelas came on in his side; he was attended by some army medical men, who checked the inflammation by some means, and the

fever was very much increased; the erysipelas returned, and the fever in a great measure left him. His tongue became very much swollen, and his head very painful; he could not speak to the persons about him, but he made a sign, as well as he could, for them to give him pen, ink, and paper, and he wrote on it to request them to send for Mr. ABERNETHY, at such a place. I immediately went, and found him with his tongue in the state which I before described; he could not articulate; his skin hot and dry, and his pulse quick. I saw that there was something terribly wrong about his stomach and bowels. I asked if his bowels had been relieved; yes, sir, was the reply, they have been properly attended to. This was not satisfactory to me, and I thought I might obtain the information I wanted from the nurse; I asked her how they appeared. Oh! very proper, very proper, sir. The gentleman heard what I asked, and made signs for paper, and wrote, "quite black and horribly offensive." I thought that by this time I had seen quite enough of my company to see that they were firm and resolute fellows; but I did not like to contend with armed medical men, so I said I would request a physician of the hospital to see him, but as it was probable that the physician could not come before the morning, I would advise him to take half a grain of calomel and five grains of jalap every four hours, mixed in a little treacle; this was to be put on a spatula, wiped upon the tongue, and then sucked down. I recommended this to be done every four hours, until the bowels were freely discharged, and left him, saying that I would send a physician early in the morning.

These are very good medicines, this calomel and jalap, and this is also a very good way of getting them down; especially in tetanus and with mad folks; you may push a gag between their teeth, and then put the physic upon their tongue with a spatula; shut their mouths, and, egad! it must go down. It does not seem to produce watery stools like salts. Well, but to return to the history of the case; I called the next morning on our patient, and was very glad to hear him say, when I came into the room, good morning to you, Mr. Abernethy, I am very glad to see you, I am much obliged for your advice, and so on. Ho! he had his jawing tacks on board, as a sailor would say; how was this brought about? He proceeded to tell me, that during the night he had several very copious alvine discharges, very black and offensive; that the irritation had subsided, and that before morning he was able to use his tongue. About ten days after, the physician called on me, and said, I wish you would see our friend; there is a large collection of matter under the integuments on his side. I saw him, punctured the abscess; let out about three pints of matter, and he got well very rapidly.

I now go on to speak of other inflammations, and next of the common boil, or furuncle; but there is also the carbuncle or anthrax. I have put these diseases under the same head, because the inflammation attending them appears to be very much alike. The inflammation in all is attended with a sense of heat and burning; the inflammation in all has a tendency to produce sloughing in the surrounding cellular substance. They seem to resemble each other so much in their circumstances, that I think we may consider them as varieties of the same disease.

The Furunculus, or Boil.

Shall I give you the history of a boil? Well, I will do so, and then have done with it; although I have no doubt but that many of you know it already. A person has a little heat and itching in his cheek, he scratches it a bit, and instead of its going away it continues to swell. It swells till it becomes the size of a walnut. There is next a thickening of the skin; by degrees it ulcerates in one or more points; if in one place, it enlarges; but if in more than one place, they run together, and a gap is made in the skin, and out comes a sloughy substance mixed with pus; the part gets well directly; it is astonishing to see how rapidly the place fills up. It seems as if the inflammation in the disease was rather peculiar, as it causes the death of the cellular substance beneath the skin of the inflamed part, whilst the skin, from having

more vitality, does not slough. This detached cellular substance with matter in its interstices forms the core as it is called; and the inflammation would subside if not kept up by this irritation, which must be discharged by ulceration. It is a disease to which young persons are much more subject than adults. I have seen very few in old persons, rarely beyond the middle period of life. They appear also more frequently upon the front of the body than on the back part, and on the trunk more frequently than on the extremities. They occur in parts which are nearest to the centre of the circulation, and are often produced by riding. I have known young men who have joined volunteer regiments, and from not being accustomed to ride, they have, after a hard day's duty, had boils upon their buttocks as big as tea-cups. (A laugh.) I shall not be able to describe the others which I have mentioned, and shall therefore leave them until the next evening.

LECTURES

ON THE

PRINCIPLES AND PRACTICE OF PHYSIC,

BY DR. ARMSTRONG.

Theatre of Anatomy, Webb Street.

LECTURE 9.

In the two last Lectures I enumerated the symptoms and described the morbid appearances of inflammation of the brain and its membranes, as it occurs in adults and in children. Having proceeded so far, it will now be necessary to explain the various causes or pathological conditions of that affection called water in the brain, or technically, hydrocephalus internus.

Hydrocephalus Internus.

It has been said by many writers that Hydrocephalus Internus is a disease *sui generis*; but if my observations be correct, that opinion is erroneous. Hydrocephalus Internus is a symptom, or rather effect of some previous affection, and may almost invariably be traced to one of the three following:—

1. *Venous Congestion.*

In this condition of the brain, the patient has an universally cold skin, a feeble pulse, a weak respiration, great prostration of muscular power, and, in the worst forms, he is insensible also. If you examine the brain after death, no trace of inflammation can be found, but the venous apparatus there is more or less congested, and an effusion of the fluid exists in the ventricles of the brain. Many weak convalescents, some infants, and old people, die in this way, through the influence of depressants productive of congestion and effusion. I once saw the child of a medical friend of mine, who died in this manner. He became unnecessarily alarmed at a slight indisposition of the child, and applied several leeches to the temples. The evacuation of blood sunk the little patient into an extreme exhaustion, and, while in that condition, the skin being cold, and the pulse thready, the pupils became dilated, it begun to squint, and, after its death, which shortly took place, a copious effusion of serum was found in the ventricles.

2. It occurs from

Inflammation of the Brain,

or membranes, arising either from a common or a peculiar cause. When arising from a common cause, it is only a variety of common inflammatory fever, the inflammation being merely seated in the brain, or its membranes. But inflammation of the brain, or its membranes, may also arise from a peculiar cause, as, for instance, in the course of measles, small pox, scarlet fever, hooping-cough, and typhus, after the fatal termination of which, where the brain has been effected, this effusion occurs.

3. *Organic Diseases.*

In old persons, the ventricles are often deluged with a serous fluid, from the great obstruction at last offered to the circulation by organic tumours, or the like. MORGAGNI, who drew his inferences simply from the facts

before him, has given a much more correct account of hydrocephalus than most modern authors; for he said, that it arises not from one cause, but from various causes. In this way it sometimes arises in children from tubercles, a specimen of which I showed in the last lecture, and sometimes from hydatids, and even organic affections, an instance of which I saw not long since in the child of a professional friend. If, therefore, you accurately note the rise and progress of the symptoms, and examine the bodies of those who die of this affection, you will find hydrocephalus internus to have arisen either from congestion, inflammation, or an organic affection of the brain. In children, the bronchial and intestinal lining will often be found simultaneously affected, and sometimes the liver. In those who had been pale, or more or less emaciated before the attack of fever, the mesenteric, bronchial, and cervical glands are frequently diseased, and in such subjects a tubercular state of the lungs and other parts is not uncommon. But I do not believe that the enlargement of the glands, either in the neck or about the bronchia, are the cause of effusion into the ventricles by the mechanical pressure which they might be supposed to make on the veins; at least I have seen many cases in which these glands have attained a very large size, without producing any such effect. Generally speaking, inflammation of the brain, or its membranes, runs a more rapid course in adults than in very young children, if we except those cases in the latter which occur suddenly and severely, and which wind up rapidly by convulsions. The brains of young children seem capable, for the most part, of sustaining a longer excitement than those of adults under an acute or sub-acute inflammation; and this is the reason, perhaps, why we very frequently find, in most cases, less effusion in the brain and between the membranes in adult bodies, the inflammation having terminated at an earlier stage.

Treatment of Inflammation of the Brain.

The treatment of inflammation of the brain is the next consideration. In the present lecture I shall advert to the treatment best suited to adult cases; and in my next, to that best suited to infantile ones. Inflammation of the brain occurring in the adult is, when combined with fever, either acute or sub-acute. In acute, the fever is higher and the local disturbance greater; it runs a much more rapid course, and is, therefore, more dangerous than the sub-acute, inasmuch as it affords less time for the operation of remedies. You will not forget, however, an exception to the above description, as far as the fever is concerned, for one form of acute inflammation occurs in the brain itself, in which neither the heart nor the pulse are remarkably affected, and in which the mental and bodily oppression are nevertheless so great as to be immediately alarming. When acute inflammation of the brain or membranes occurs, the legal maxim,—

"*Nullum tempus occurrit regi,*"

might be changed thus,—

"*Nullum tempus occurrit medico;*"

for time then is of inestimable value, if properly employed. But if, in such cases, hour after hour be lost in doubt and indecision, the patient assuredly is sacrificed. If I wished to inspire students with the highest confidence in the remedial powers of physic; I would take them, at the outset, to a series of cases connected with acute or sub-acute inflammation, which, rightly managed then, would nearly always end favourably. If I wished to make a man a complete sceptic in physic, I would show him cases which had been neglected or maltreated in the commencement, for most of such, unhappily, would have an unfavourable termination. A Frenchman once observed, that the only difference which he knew between the English and French physicians was this: the English killed their patients by their heroic or active treatment, whereas the French allowed theirs to die by their expectant or inert treatment. If you trace the practice of most physicians, you will find that they are remarkably attached to some particular practice, which is pushed beyond the legitimate boundary. One is too partial to bleeding, another to

purging, a third to bark, a fourth to blue pill, and so on; but the fact is, that if any man wish to practise with general success he must not be attached to one plan, but vary his treatment according to the circumstances of each particular case, for even if he possess correct general principles, still he must carefully take into account all the circumstances which modify the employment of remedies. His success will depend on the precision with which he detects these modifying circumstances, and the skill with which he adapts his measures to them and the existing affection. GALL thinks, that decision of character, or firmness, is connected with a peculiar formation of the head, especially, if I mistake not, about the crown. But I believe, that if a man's head were as taper at the top as a sugar-loaf, like the Macrocephali described by Hippocrates, that he would become decisive in his practice in acute inflammations, merely by witnessing the bad effects of a contrary method. It is the grand peculiarity of the human intellect, that it has the power of varying its determination as the occasions may require, and the cultivation of this power is of the highest utility to the medical practitioner. You will remember that I do not place the efficacy of the treatment entirely in the administration of medical means, but in the co-operation of medical, regimenal, and mental measures; the following of which are those upon which most reliance is to be placed in the removal of acute and sub-acute cerebral inflammation.

1st. Bloodletting.

We can do, by bloodletting, in acute or sub-acute inflammations, in five minutes, what we could not do in five days by any other measure; therefore, in all such affections of the brain it is the principal remedy, the first, without which nothing effectual could be done. If the inflammation be acute or sub-acute; if the heat be high on the surface and the pulse expanded, or hard and contracted, then the patient is under the most favourable circumstances for bloodletting. No precise quantity of blood can be mentioned as necessary to be taken away for the removal of any kind of inflammation. We have not yet arrived at that mathematical accuracy which enables us to say, that ten, twenty, or any other determinate quantity, will suffice in inflammation of the brain or membranes. You must be guided by the effect produced, and not by the quantity drawn. Under the circumstances above-named, you must bleed the patient to approaching syncope. If you bleed a patient to-day, with reference not to the effect but to the quantity, and bleed him again to the same extent to-morrow, yet if you do not make an impression on the heart's action, you do no good in cases of intense inflammation; nay, you do harm, because you weaken the patient, and leave the disorder unsubdued. In all cases, then, of acute inflammation, where the fever is freely developed, observe this rule—bleed the patient either till the pain be removed or till syncope approach, till, in fact, the pulse become a mere flattering thread beneath the finger. The quantity requisite for this end is exceedingly varied in different patients. Once I attended two persons abont the same time, one who laboured under inflammation of the lungs, the other under inflammation of the brain; in the former case, which occurred in a man of very extraordinary strength, about fifty ounces were necessary, whereas in the latter, about a table spoonful answered; the effect in each case was the same, namely, approaching syncope, and the subsequent removal of the inflammation. If you can produce approaching syncope by the abstraction of a small quantity of blood, so much the better, and the best way of accomplishing this is to bleed the patient while in the erec position, in which syncope, or faintness, the soonest approaches. You have a very good example of the effect produced on the capillary vessels by bleeding, in the case of common acute inflammation of the eye; if you stop short before approaching syncope be produced, the conjunctiva remains as red as before the performance of the operation; but if you continue the abstraction of blood until the state just mentioned be produced, you will find that the conjunctiva will be perfectly blanched, the blood having then left the capillary vessels of that part.

Frequently, one such bleeding as this will be sufficient to remove the inflammation, and thus the strength is saved by avoiding repeated venesection.—Strong men require a larger quantity of blood to be drawn than weak ones, generally speaking, to produce the same effect, and males generally more than females. But the rule by which you must be guided in all acute and sub-acute inflammations, where the fever is fully developed, and where a vital part is concerned, is that which I have mentioned before, and be sure to act upon it in such cases, for half measures are then mostly fatal. But whenever you have occasion to bleed in this decisive manner, always make a point of laying the patient quite flat before the fainting shall actually take place, and then there will be no danger from perfect syncope, if it should supervene. Bear this rule constantly in mind where you are compelled to abstract large quantities of blood. If the local disturbance should return with the fever after the first bloodletting, it will be necessary to repeat the operation in the same manner as before, particularly if the inflammation be acute; for the sub-acute form being much more protracted, there is less occasion for promptitude in the repetition of venesection than in the acute, which requires that much should be done in a short period. If a decided impression shall have been made by one, two, or three bloodlettings, as the case may demand, then the application of leeches to the temples often has an excellent effect in removing any residue of inflammation. But always recollect to combine the secondary with the principal means—the small arms with the artillery of physic.

The *second* means for the removal of inflammation of the brain or membranes, is the use of *purgatives*. The stomach is very irritable, and the bowels sometimes are very torpid, and when this is the case, you may be quite sure that you have not carried the bleeding sufficiently far, for the patient has frequent nausea, retching, or vomiting, and the bowels are not obedient to aperients. You must remove these conditions by decisive blood letting, and not trust to effervescing draughts to relieve the stomach, nor to purgatives, however administered, to relieve the bowels in the first instance; but remove the remote inflammation, upon which these symptoms mainly depend. While, however, you are attempting this by bloodletting, you may often assist in allaying the irritability of the stomach, by unloading the colon, through large injections, which should not contain less than a pint and a half, or two pints, so as to distend the lower gut, and dislodge the accumulation of fæces, if any remain in the colon. If you put into this injection three or four drops of croton oil, it will have a very good effect, and I think that this is generally the best mode of exhibiting this medicine; for when given by the stomach it is apt to produce not only irritation of the mucous membrane of that organ, but also of the small intestines, an effect less remarkably produced on the same structure of the large intestines by this drug. When you have allayed the irritability of the stomach, and emptied the colon, then you may give purgative medicines. A combination of several is better than any of them singly exhibited; generally give three grains of *calomel*, with the same quantity of *jalap* and *rhubarb*, made into pills; and follow up this dose in two or three hours, with *castor oil*, or the following mixture, which I am frequently in the habit of using in these cases:

Infusion of Senna, ℥vi.
Sulphate of Magnesia, ℥vi.
Manna, ℥ij.
Carbonate of Magnesia, gr. xii. or ℈j.

Three table spoonfuls may be taken at first, and two table spoonfuls be repeated every two, three, or four hours, till the bowels be fully and frequently relieved. In all ardent fevers it is not an easy thing to get the bowels to act, unless you educe the intensity of the heat by bleeding, ablutions, a cool apartment and a spare diet. For some time past I have combined *colchicum* with purgatives, in the treatment of common inflammation of the brain, and some similar affections, with considerable success as an auxiliary to bloodletting. Usually I have given five or six grains of the powdered bulb, two, three, or four times, in twenty-four hours; but whenever nausea occurs from its use, be

sure to withdraw it immediately, for if persisted in after that effect, it might produce dangerous relaxation of the whole body, with irritation of the stomach and intestines.

3d. *Regulation of temperature.* The head is considerably hotter than natural, and whenever you can get it shaved without producing much mental irritation or alarm, you should order it to be done; but do not generalize indiscriminately, and direct every person's head to be shaved; but make the proposition, if the patient be sensible, as if the shaving were for the purpose of ensuring a good crop of hair afterwards, or as if it were for the purpose of present comfort. But if the patient be agitated at the proposition and resist it strongly, do not press it further; but then be content with thinning the hair. You should, while the head is preternaturally hot, apply a single piece of thin linen over the scalp, dipped in cold water. I don't like the mode of applying cold by bladders, filled with water or ice, because the weight is extremely objectionable. The use of æther and spirits of wine in evaporating lotions, I also dislike, because the vapour of them is sometimes drawn up the nostrils, and produces a stimulatory effect. Be careful that the animal heat is not too much accumulated over the whole surface, by loading the patient with bed clothes. When the animal heat on the surface is increased very much, it keeps up the action of the heart, and thus tends to maintain the inflammation. Let the patient be covered by a single sheet, and even in winter you will find that a quilt over that will be quite sufficient, as long as the skin shall continue hot and dry. Take care also to regulate the temperature of the room in which the patient lies, especially towards evening, and recollect the caution which I formerly gave you respecting the conduct of nurses in considering their own comfort. The feet are frequently cold in inflammation of the brain and then *sinapisms* applied there will be found useful. They may be made of equal parts of crumb of bread and mustard flour, mixed up with some warm vinegar, and should be applied to the feet for about a quarter or half an hour, or even longer, until a tingling warmth be produced, then they ought to be removed, and the feet wrapped in flannel.

The *fourth* mean in treatment, is the *elevation of the head and trunk.* By the laws of gravitation, in adopting this practice, you must diminish the flow of blood to the brain through the arteries, and materially assist the return of blood from the brain by the veins. This may be very easily done by having an inclined plane screwed upon the bedstead, and the bed laid upon that, or still more easily, by placing blocks of wood, 6, 8, or 10 inches high under the upper parts of the bedstead, a footboard being at the bottom.

The 5th point in the treatment is the abstraction of all mental and physical excitants, a term by which I mean irritants and stimulants. I am always very much concerned when called to patients having inflammation of the brain in any of the very noisy streets of London; if I can, with perfect safety, get them removed from such situations, I invariably do so as early as possible; but when I cannot get them removed, I place them in the quietest room in the house, because noise is a dreadful thing in the first stage of most cases. Let the business of the house be done with as little disturbance as may be; and if the patient be still affected by the noise in the street, lay straw down, and put cotton in the ears. Do these things, however, only where they are necessary; never make an unnecessary fuss for the sake of attracting attention; for if a man have merit, it will be discovered sooner or later, even if he should have ever so many enemies; and honest men will always despise every species of trickery, the trade of weak minds. Another circumstance is the management of light. Do not let the patient have white bed curtains, or white window curtains; but let a green blind be put over the window, and the light curtains, if such, be removed. I have known many patients fall into a tranquil sleep immediately that this change was made. Light and noise are two very powerful irritants, and should therefore be invariably avoided. I recollect having been called to a young lady who laboured under inflammation of the brain, and it

appeared to me, on investigating the history of her case, that the irritation was kept up by the anxiety in which she saw her father and mother, who were alternately or together coming into the room through day and night, to see and inquire how she was going on. I said that it was not in the power of physic to do her any good if they continued to visit her in this manner, and that I could not be answerable for the consequences. At my request they left her for some time alone; she fell into a tranquil sleep, and recovered from that time. You must never sacrifice the conviction of what is right, on your part, to the feelings or intreaties of the friends, whose affection always prompts them continually to do what they consider an act of kindness; but which is often injurious, by depriving the patient of quietude and repose, which are essentially necessary in the treatment of such delicate cases.

6th. The *diet*. The regulation of this requires great firmness in most acute cases, as the public prejudice is in favour of cramming. When the ancient republic of Rome was in imminent danger, a dictator was elected, and endowed with supreme authority; and when the republic of the human body is in danger, the medical attendant must be an absolute dictator (*a laugh*). This dictator, alias doctor, must direct, and see that others obey. As long as the skin shall continue very hot and dry in acute inflammations, accompanied by a full or a hard pulse, water will be not only the best drink, but the best diet too; but when the fever is fairly on the decline, a light nutritious diet may be allowed morning, noon, and evening, such as a little milk whey, arrow-root, gruel, or any similar article. Even in convalescence the change should be very gradually made to a better diet.

7th. *Blistering*. Never apply a blister while the heat is highly developed, or the sensibility highly augmented; when you have reduced the urgency of the febrile symptoms, by the modes before pointed out, and a slight degree of uneasiness only remains, then a small blister applied to the nape of the neck, or epigastrium, is often attended with considerable advantage. But in the first stage of inflammation of the brain, never apply a blister, while the patient is preternaturally sensitive, over the head; but on the approach of the second stage, when torpidity or heaviness occurs, it is frequently beneficial when applied there.

The 8th means is the use of *Opium*. When the inflammation of the brain has been subdued, or nearly so, by evacuations, and you still find the patient with a skin hotter than natural, a remarkably hurried respiration, a small thready, rapid, or tremulous pulse, and when he complains of lightness in his head and is extremely restless, tossing to and fro in his bed constantly, in short, changing his place or position, a full dose of opium, two or three grains, will be found exceedingly beneficial; indeed it may be considered a sovereign remedy under such a state of general irritation. I have seen several cases where full doses of opium have produced the very best effects. Opium may also be given with very great success in some cases of madness; but recollect never to give opium in inflammation of the brain till copious evacuations have been premised, and till great restlessness supervene.

I have considered inflammation of the brain in adults as having occurred without any other inflammation: sometimes this is the case, but at other times inflammation of the brain is attended by inflammation in other organs, such as the serous or mucous membranes in the cavity of the chest or abdomen. In old persons and in children, you will often find the bronchial membrane inflamed at the same time, and this combination requires some modification of the treatment. When inflammation of the brain occurs in very aged persons, you must endeavour to check it by the smallest possible loss of blood, when combined with a bronchial affection, because if you bleed such an individual in the same decisive way in which I have recommended persons to be bled in the middle period of life, without such a concomitant, the case would generally terminate unfavourably. One of two things would happen, the aged person would either sink under the copious bleeding, or, if he recovered, he would drag out a miserable ex-

istence by remaining in a very weak and languid state. Generally speaking, moderate bleeding will suffice in old persons, if you adopt the other means simultaneously. I believe, that in the management of such cases, I have drawn less blood than most other practitioners; and I think it is because I have paid so much attention to the regimenal and mental treatment, the influence of which is so highly important. Success in practice depends not so much on the application of one measure, in many instances, as on the co-operation of several, contributing to the same end.

The exciting causes from which inflammation of the brain proceeds very much modify the treatment. If, for example, any man were to say, that because the brain is inflamed in the advanced state of typhus fever, the case then requires the same treatment as an inflammation of that organ in the commencement which arises from a common cause, he would commit a great mistake; for in the former the inflammation is passive, the heart's action being subdued, and the strength prostrate, so as to require mild measures. Common inflammation of the brain may almost always be speedily removed by the plan which has been laid down; and if any degree of simple fever should remain, it will be removed by rest, spare diet, daily aperients, and a regulated temperature; but when these means fail, then you may prescribe digitalis, say 10 drops of the tincture every 6 hours, till the pulse be reduced, when it ought to be entirely omitted.

Prognosis.

In your prognosis of inflammation of the brain you must be guided first by the *degree* of inflammation. In acute inflammation there is more danger than in the sub-acute, because the former runs a more rapid course, and allows less time for the operation of remedies. The *habits* of the patient very much modify the prognosis. If inflammation of the brain attack a confirmed drunkard, it generally proves fatal. If the patient labour under excessive anxiety of mind, it also generally proves mortal. If it occur in an aged person, it is more dangerous than in a man of 30 or 40 years of age; because the old do not bear evacuations so well as younger persons, and the inflammation is frequently mixed up with some organic affection. What at first sight appears to be simple inflammation is sometimes the result of an organic affection of the brain; and, in order to detect this, you must trace the history of the disease backwards, from its origin through its progress, and up to its present state. I recollect having attended a lady who died of an apparent attack of inflammation of the brain. On examining the body after death, a chronic abscess was found in the cerebrum, and another in the cerebellum, while the liver was likewise much enlarged, breaking short like gingerbread on handling.

She had complained a long time before of pain and uneasiness on the front and back part of her head, and also at the pit of the stomach. This chronic disease was wound up by an attack of acute inflammation, which ended of course fatally. When delirium occurs very early, and continues constantly, in inflammation of the brain, it is a very unfavourable sign. Squinting is a very unfavourable symptom, but before forming your opinion from this point, you should ascertain that the patient did not squint in health, and always consider the combination of symptoms. Difficulty of deglutition, great prostration of the muscular form, gathering the bedclothes into folds, picking feathers, catching at things in the air, are very serious, and often fatal symptoms. But, however unpromising the appearance may be, I would advise you never to give a patient entirely up who is labouring under inflammation of the brain; for I have seen several recover under the most discouraging circumstances. If you should give a decidedly fatal prognosis, the friends will be sure to call in another practitioner, on the supposition that *you* can do nothing more; and if by any chance the patient should recover, your reputation might be sacrificed, or, at all events, be much injured. Such is the uncertainty of human opinion, on some occasions, that it always becomes us to speak with caution, especially on a subject where the public are prone to make too little allowance for any failure,

and equally prone to give credit for cures which are often recoveries through the energies of Nature alone. In the advanced stage of most febrile affections, it is a main point to do no harm, to remove all opposing circumstances, so that Nature may have fair play in the struggle which is decisive of life or of death.

[ERRATUM.—In Dr. ARMSTRONG's last lecture, p. 297, for "*lancial* incision," read "*crucial* insicision."]

REVIEW.

Lectures on DIGESTION *and* DIET. *By* CHARLES TURNER THACKRAH, *Esq. Member of the Royal College of Surgeons in London, and of the Société de Médecine-Pratique de Paris, &c.* 8vo. pp. 156. London; Longman, and Co.

PHYSIOLOGY is at all times an interesting object of pursuit to men of science generally, but particularly to those who are engaged in the practice of physic. Whilst an acquaintance with physiology is useful and important to the former, it is absolutely necessary to the latter; if they wish to execute the duties of their profession successfully, or to maintain that rank in the estimation of society, which has been assigned to them by the general diffusion of information, and the cultivated condition of the human mind. The consideration of the laws by which the functions of an animal body are regulated cannot be too attentively studied, nor can the knowledge, derived by such consideration, be too extensively diffused. The design of the present work is to furnish a general sketch of physiology; to supply information in a style that may engage the attention, and afford instruction to the profession, and at the same time be perfectly intelligible to the community at large.

There is nothing in the nature of the subject to deter any one from becoming thoroughly acquainted with it; but the inducements to do so are many and forcible. Is it not interesting to watch the gradual development of the structure of the human body, from the tender susceptibility of childhood, through the active season of youth, to the firmness and vigour of mature age? Is it not interesting to become acquainted with the mode in which the accumulation of the material for the edifice is accomplished, and to notice the changes which this material incessantly undergoes? Then it is to physiology we are indebted for the explanation, and for revealing the internal springs that impel and regulate the movements of the very complicated machinery of which the body is composed. From knowing when the motions of the whole are perfectly performed, we are enabled to appreciate the minute deviations of its parts, producing disturbance and derangement throughout the frame-work; which the eye of the scientific engineer soon discovers and sets right. What we have figuratively said, respecting physiology itself, is also applicable to its influence on society: it is a subject that relates to the well being of every individual; the knowledge of it enables him to avoid the dangers to which his health is daily exposed; to mark the insidious encroachments of disease, and to detect the ignorant pretensions of those on whom he may call for assistance.

"For until," as Mr. T. justly remarks, "the public attention be turned to physiological inquiries, these inquiries will be but coldly conducted." The reason is plain, because there will be little inducement to perseverance, where there is but little respect for zealous and successful exertions. The public having taken an interest in such important pursuits would convince medical men of the necessity of rousing themselves from a state of inactivity and supineness, and urge them on with fresh vigour to the work of scientific investigation.

Yet objections are made to the dissemination of physiological, and especially of medical information; there are men always to be found who are opposed to the progress of knowledge, but their efforts are now too late. The night of ignorance is almost past, and the phantom of prejudice, which had for a season chilled the growth of intellect, and impeded the circulation of knowledge, flits and dwindles away before the light of science. While philosophy is extending her influence over new regions, and enlightening men who were before rude and barbarous, surely there need be no hesitation in stating boldly that, which has truth for its basis and utility for its end. The system of mystery and concealment which served only to shelter the ignorance of persons who once practised physic is now gone by; and men are made amenable to the authority of common sense.

The substance of the work before us was delivered in seventeen lectures before the Philosophical and Literary Society of Leeds, in 1822 and 1823. The book is divided into three parts or lectures.

I. On the function of Digestion.

II. On Diet;

III. On Disorders of the Alimentary Canal;

The principal diseases of which are briefly adverted to, their causes, and occasionally the means of prevention.

The commencement of the first Lecture, or that on the function of digestion, explains in a familiar way the conversion of the food into the nutritive fluid of the body. It glances slightly, also, at the different hypotheses which have, from time to time, been broached on the subject; and Mr. T. then finishes the account of the process of digestion with the following remarks:—

"Digestion, then, though it affects a decomposition of our food, and a recombination of its parts, is not a common chemical process. The stomach is a laboratory which art cannot imitate. Its operations are governed by peculiar laws, as yet but partially *developed* (understood), laws depending on that influence which distinguishes animated from lifeless matter. Digestion is a vital operation. This is evident from all its phenomena. I might refer to the obvious determination of the vital powers to the organs of digestion. The arteries of the stomach and intestines act with increased energy; the muscular tunic is irritable; the sensibility of the whole apparatus is augmented. While from this determination to the internal organs a general shivering is often felt, and the skin in persons of delicate health is pale and contracted. You may remark the drowsiness also which succeeds to a full meal, and the inaptitude of the senses to receive impressions. The dog retires to his kennel, and man lolls in his chair, indisposed for muscular and incapable of intellectual exertion."

The observations made on the sensations of hunger and thirst are rather laconic, nor do they contain any new opinions; but are enlivened by the recital of a few interesting cases. Mr. T. is inclined to think with MAGENDIE, that "thirst is an internal sensation, an instinctive feeling; that it belongs essentially to the organization, and admits of no satisfactory explanation." The following sentence appears rather paradoxical; the author says, that "in the present state of our knowledge, no *theory* can be firmly established; but the facts to which I have adverted lead to the opinion, that the state of the nervous and vascular systems termed *thirst* arises from, what no one has ever attempted to deny, *a want of secretion in the mouth and throat.*"

The horrible feelings produced by complete abstinence have been lately recorded in a Number of Hufeland's *Journal der Practischen Heilkunde*, which Mr. T. has transcribed. The substance of the case is as follows:

"A German merchant, aged 32, depressed by severe reverses of fortune, and the consequent slights of his relatives, formed the resolution of destroying himself by abstinence. With this view, he repaired, on the 15th of September, 1818, to an unfrequented wood, where he constructed a hut of boughs, and remained, without food, till the 3d of October following. At this period, he was found by the landlord of a neighbouring pot-house,—still alive, but very feeble, speechless, and insensible. Broth, with the yolk of an egg, was given him. He swallowed it with difficulty, and died immediately.

"In the pocket of the unfortunate man was found a journal, written in pencil, singular in its kind, and remarkable as a narrative of his feelings and sentiments. It begins thus:—'The generous philanthropist, who shall one day find me here after my death, is requested to inter me; and in consideration of this service, to keep my clothes, purse, knife, and letter-case. I moreover observe, that I am no suicide, but have died of hunger, because, through wicked men, I have lost the whole of my very considerable property, and am unwilling to become a burthen to my friends.' The ensuing remark is dated Sept. 17th, the second day of abstinence:—'I yet live; but how have I been soaked during the night, and how cold has it been! O God! when will my sufferings terminate!! No human being has for three days been seen here; only some birds.' The next extract continues,—'And again, three days, and I have been so soaked during the night, that my clothes to-day are not yet dry. How hard is this, no one knows; and my last hour must soon arrive. Doubtless, during the heavy rain, a little water has got into my throat; but the thirst is not to be slaked with water; moreover, I have had none even of this for six days, since I am no longer able to move from the place. Yesterday, for the first time during the eternity which, alas! I have already passed here, a man approached me within the distance of eight or ten paces. He was certainly a shepherd. I saluted him

in silence; and he returned it in the same manner. Probably he will find me after my death!'

"'Finally, I here protest, before the all-wise God, that, notwithstanding all the misfortunes which I have suffered from my youth, I yet die very unwillingly; although necessity has imperiously driven me to it. Nevertheless I pray for it. Father, forgive him; for he knows not what he does! More can I not write, for faintness and spasms: and this will be the last. Dated near Forest, by the side of the Goat public-house, Sept. 29th, 1818. —J. F. N.'

"It is hence evident that consciousness and the power of writing remained till the *fourteenth day* of abstinence. The operation of famine was aggravated by mental distress, and still more by exposure to the weather. This indeed seems to have produced his most urgent sufferings. Subsequent to the common cravings and debility of hunger, his first physical distress seems to have been the sensation of cold; then cold and thirst; lastly, faintness and spasms. In this case, we find no symptoms of inflammation. A want of nervous energy, arising from the reduction in the quantity or quality of the blood, appears to have been the principal disease. The effort of swallowing, and the oppression of food on the exhausted stomach, completed the catastrophe."

Death occurs from hunger soonest in the young and robust; their vital organs appear to be accustomed to greater action than those of the adult age. The abstraction of aliment, and the consequent reduction of the volume of blood, would be soon and severely felt. Hence the inability of the growing and robust to sustain a protracted fast. This division of the subject is concluded by a hasty review of a few of the peculiar properties of the digestive organs, the vigour of the nervous agency of the stomach, and the remarkable sympathies which exist between it and other parts of the body.

We now reach the most interesting and useful division of the work, that which is devoted to the consideration of Diet, and its influence on the corporeal and mental energies of man. We cannot follow our author through the minute varieties of diet of man, and the lower animals, according to their situations, or their artificial habits; these have been collected with ability, from the sources of natural history and comparative anatomy. Having before spoken of the effects of the animal and vegetable diet, the author remarks that it is the *mixed* diet that should claim our particular attention.

The great object of digestion is the formation of chyle; consequently, that food which supplies the greatest quantity of it will be most nutritious. In this view, let us compare vegetable and animal food.

"In reference to vegetables, it has not yet been ascertained, which of their constituents afford the materials of chyle; but it is probable that the chief are starch, gluten, and sugar. The first of these forms the basis of our principal vegetable food, the farina of seeds. Gluten is an important addition. To its agency, I believe, we owe the formation of flour into bread. Those vegetables which are

destitute of gluten, are proportionately less convertible into chyle. Hence, rice and potatoes, though abounding in starch, yield comparatively little nourishment. This is not contradicted by the Hindoos living on rice, or the Irish on potatoes; for both nations take *large* quantities of food, and with the addition, moreover, of a nutritious animal fluid, milk.

"Sugar seems the first support of vegetable life; and it is well known to be the principal food of young animals. It, perhaps, yields a greater quantity of chyle than any other constituent of plants. The slaves in the West Indies are lean and weak when they live on rice, but become fat and robust in the sugar season.* Indeed, this period restores vigour, health, and hilarity to the whole district,—to the cattle as well as the men. 'In decrepid old age,' says Richerand, 'some persons live exclusively on sugar.' Sugar is contained in most vegetables, but is well known to be especially abundant in the sugar-cane, in the grape, and in fruits in general. Of roots, the carrot, beet, and parsnip, are understood to possess the most.

"The elements of chyle are evidently more abundant in animal, than in vegetable food. Marcet found the chyle of carnivorous creatures to be whiter, to contain more solid matter, and to yield more albumen, than that of the herbivorous. This observation we should anticipate, from considering the nature of animal food, and the approximation of its principles to those of the product of digestion. Gelatine, albumen, and fibrine, the chief constituents of flesh, approach nearer to the nature of chyle, than starch, sugar, and gluten, the chief constituents of vegetables. Azote is the principal element in the animal fabric. Flesh, therefore, yields it abundantly; while in vegetable substances it is scanty, and in many, as urged particularly by Magendie, wholly absent. When, however, this gas is not provided in the food, it may perhaps be derived from the atmosphere, by the lungs or skin. In articles of animal food, there is less variety than in those of vegetable. Though greatly differing in their digestibility, almost all yield abundant chyle. Muscle, on the whole, is the most valuable.

"During the period of growth, the nutritious quality of aliment is especially important. A mild animal diet is most suitable for children. We remark that the young, even of some granivorous creatures, are fed with animalized food. Milk is the sustenance of calves and lambs. The young pigeon is fed from its parent's crop with grain moistened by the secretions, and mixed with curd. The middle period of life requires more of a vegetable regimen, and a stricter attention to temperance. It is this period, for which dietetic rules are chiefly adapted. The change from a high to a reduced diet can rarely be borne in advanced life. Nor does a low diet, even if practised before, suit this period. Age requires food in small quantity, but nutritious and soluble. At every period, and in every state, the diet should be accommo-

* *Impure* sugar is said to contain a considerable proportion of azote.

dated to the power of the digestive organs. This is considerably reduced in the advance of life; and the work allotted to it, should be proportionately small, and of easy execution. Such was the practice of Cornaro. 'O, how advantageous it is to an old man to eat but little! Accordingly, I, who know it, eat but just enough to keep body and soul together; and the things I eat are as follows. First, bread panado with an egg, or such other kinds of soup or spoon-meat. Of flesh meat, I eat veal, kid, and mutton. I eat poultry of every kind. I eat partridges, and other birds, such as thrushes. I likewise eat fish, for instance, the goldney, and the like, amongst sea fish; and the pike, and such like, amongst fresh-water fish. All these are fit for an old man.'"

The quality of different kinds of food have been considered in a way which cannot fail to interest those who wish to preserve their health by attention to regimen. The quantity of food necessary for different persons must very much depend on their habits, and on the state of the stomach itself.

"The *periods of eating* deserve some attention. The habit, which leaves the great bulk of the day without a meal, and then crowds two or three together in the evening, is manifestly bad. Heavy suppers are generally improper; they cannot be digested before bed-time, and the operation of the stomach must be imperfect, when the nervous functions are reduced or abolished. The number of meals which generally suits the digestive organs is three or four, at regular divided intervals during the day.

The subject of *drinks* is the next for our examination. When we consider how large a proportion of the body is fluid, and how this is thrown off continually by the secretions, we see the necessity of some considerable supply. Of simple drinks, that which Nature has so liberally provided, is undoubtedly the best; but the varieties in its quality deserve some attention. *Cocoa* and *chocolate* have not, I believe, been sufficiently examined; in nutriment they are probably much inferior to *milk*, whilst the oil with which they abound, often renders them oppressive to the stomach. When this effect is not produced, they are preferable to tea. *Malt* liquor, containing a quantity of sugar, is very nutritious, and is very proper for persons of active employment. To some delicate individuals it forms a valuable aliment. To the plethoric and indolent it is decidedly injurious. It oppresses the stomach, induces heaviness of the head, and a diminution of mental and corporeal activity.

Tea is a narcotic, and hence naturally injurious; but experience scarcely warrants our attaching to it a high degree of evil agency,—at least, in the common way, and to the ordinary extent in which it is taken. I know not what the citizen could advantageously substitute. It appears well calculated to obviate the effects which arise from the excess of food, and the inordinate stimulus of spirituous potation. Black tea, drank in moderation, produces, in most persons, effects rather useful than prejudicial. It evidently gives a mild impulse to the circulation, and excites a genial moisture on the skin.

Most of the highly-flavoured teas excite the nervous system; and when taken in large quantity, or at an improper time, produce great disorder. The green seems to have most of the narcotic property. Its sedative effect on the heart is sometimes alarming.

The properties of *coffee* have been disputed. We need not examine all that has been written on its beneficial and baneful effects. Daily experience is our guide. Coffee is a narcotic stimulant. It removes the sense of fatigue and exhaustion, and it gives vigour and hilarity to the mind. The wearied student, the brain-racked inquirer, hails it as his comforter and support. Voltaire almost lived upon coffee; the great Harvey took it constantly and freely. This was the habit,

too, of Horace Walpole. Indeed, to many scientific and literary men, the coffee-cup is the regular companion of the inkstand. These coffee-drinkers, however, sometimes suffer serious disorders of the stomach or the head, as indigestion, nervous irritability, headache, or palsy. But the proportion of evil, which results from the coffee, cannot be accurately compared with that which results from the study. Nor does the ardent student care to inquire. He knows that strong coffee assists his intellect. He is not the servant of his stomach, nor will he consult its likings at the expense of a more noble organ. Here he is in error. He forgets the sympathy between the stomach and the brain. But ere long he will be taught it, in a way not the most agreeable, either to his intellectual powers, or his corporeal feelings. Fretting of the stomach, and consequent irritability of nerve and of temper, will soon be as troublesome as impertinent visitors, and equally disarrange his ideas and break the catenation of thought.

The importance of the subject of diet, and its immediate application to the health and comfort of every individual, have led me into a considerable length and labour of detail. Errors in diet are the great source of disease: amendment of diet is the basis of recovery. The majority of our maladies medicine may relieve or suspend; but, without the aid of regimen, can never cure."

3. *Disorders of the Alimentary Canal.*—The nature of the work has precluded a very extensive consideration of these affections, or of the influences which they exert on the general health. Physiology, however useful as a matter of study, in the regulation diet, and consequently in the prevention of disorders of the alimentary passages, cannot do much for persons in a way of treatment, unaided by a knowledge of anatomy and pathology. An acquaintance with the doctrines and descriptions of disease is of importance to the public generally, for, independent of its direct advantage, it would act as a preventive of evil, by exposing the folly and danger of universal remedies, and the knavery of those who vend them. But to do this away, the medical profession must lay aside that appearance of interested feeling which has led the public to distrust its censures.

In this department of the work, the disorders of the alimentary canal have been cursorily examined, and many useful hints are found on particular affection. It is, in our opinion, the most exceptionable part of the work, because the brevity of the description has rendered it impossible for the author to do the subject justice. The book, indeed, professes to be only written on *Digestion* and *Diet*; as such it is executed with perspicuity and ability, and cannot fail to be generally interesting.

CHEMISTRY.

A Chemical Analysis of the UPAS, *or* TICUNAS *Poison.*

This poison exerts such a formidable action on the animal body, and destroys life with such rapidity, that a scientific examination of it cannot fail to be interesting. All that has been known of it to the present time in this country is, that it is a vegetable production, found in the West Indies, and it was formerly used by the savages to poison their arrows. It is to the French that we are indebted for the discovery of the active principle of this vegetable matter, as we have been for almost all others. They pursue the science of vegetable chemistry with an alacrity that far surpasses their contemporaries, and have materially enriched the store of the practical agents

by the investigations which they have so successfully conducted.

The examination of the *Upas* has been lately undertaken by two distinguished French chemists, PELLETIER and CAVENTOU; and, from the channel through which they received the poison, there can be no doubt of its being unadulterated. M. LISCHENAULT, a learned naturalist, when making a tour of the Indian Archipelago, went into the interior of the country for the express purpose of obtaining from the plants themselves the poisonous matter. He had it prepared there under his own inspection from the materials which he had himself collected; and he satisfied himself that the poisons now called *Upas tienté* and *Upas anthiar*, were furnished, the one by a large tree of the family of the Strichnos, which he named Upas tienté; the other from the gum resin of a tree which forms a species of a new genus under the name of *Anthiaris toxicaria*.

The action of both these poisons on the animal economy has been already sufficiently studied by the celebrated physiologists MAGENDIE and DELILLE, who showed that the Upas tienté operates by absorption, exerting its action principally on the spinal marrow, so as to produce tetanus, asphyxy, and death. The Upas anthiar also operates on the nervous system, but it occasions at the same time violent vomiting and purging. The knowledge of the chemical composition of these poisons remained only to be acquired, and it was for this purpose the present examination was undertaken.

1. *The Upas Tienté.* In the form of a solid extract, it is of a reddish brown; broken into small pieces, it is of an orange yellow, and transparent. Its taste extremely bitter, without acidity or any pungent aromatic flavour. It dissolves in water, yielding to it an abundance of a matter like brick-dust, which being well washed is tasteless. The solution is of an orange yellow, and horribly bitter. It dissolves almost entirely in alcohol, but scarcely at all in sulphuric æther. It is not soluble in the oils, and is without any peculiar smell. Exposed to the action of fire, it becomes soft and then dries up. If the heat be increased it is decomposed, swells up, and disengages a fetid empyreumatic odour. This aqueous solution is precipitated by the alcalis, by the infusion of galls, the alcaline gallates and oxalates. These precipitates dissolve in alcohol.

The active principle of the upas depends on the quantity of *strychnine* which it contains; and that it yields it abundantly will be proved by future experiments. Strychnine is supposed to be reddened deeply by the action of concentrated nitric acid, but MM. PELLETIER AND CAVENTOU discovered that a yellow, insipid matter, in combination with the strychnine possessed the property of becoming red, on the application of the acid, and that as the strychnine was separated from this yellow matter, that power of becoming red on the application of the acid diminished. This circumstance was considered of great importance, and induced them to examine whether the red colour yielded by *brucine* and *morphine*, when treated with nitric acid, was dependent on the presence of the same material as was combined with the strychnine; but they found, that however white, and well purified these might be made, that they were always reddened by the nitric acid. As the brucine and morphine possessed the common property of becoming reddened by the acid, the next point was to determine how the one might be distinguished from the other, and they accordingly instituted a set of experiments from which they obtained the following results. If the nitric acid with the brucine or morphine were heated until the red colour disappeared, and if you were then to add a strong solution of the *hydrochlorate of tin* to each, you would find it produce with the brucine a beautiful *violet* colour; whilst the morphine would not be changed from the yellow colour produced by the heat. These circumstances are worthy attention, because these active principles of vegetables may hereafter become the subjects of legal discussion, and we shall then value these tests, which will enable us to discriminate them with precision.

As to the action of this strychnine of the upas on the powers of life, it is really astounding. A quarter of a grain diluted in a little water, was injected by M. ANDRAL, jun. into the

pleura of a rabbit; in about *five seconds* it was seized with a violent attack of tetanus, and died. The experiment was repeated on a second rabbit, with the same quantity of the poison, but dissolved in weak acetic acid, the effect was even more sudden and terrible.

2. *The Upas Antiar.* This presents the same external appearances as we have described in the former. A white matter was extracted from this poison, elastic, insoluble in cold or boiling water, and softened in such a manner as to appear very much like the nasal muscles. A crystalline substance was extracted from it, very soluble in water or alcohol, possessing all the energetic properties of the upas. The base of this salt appears to be a vegetable alcali, but as yet it is not known. That its action on the nervous system is powerful enough may easily be conceived; one of the experimenters very inconsiderately tasted a minute portion of it, he was immediately seized with violent pain in his stomach and bowels, which yielded only to a very abstemious diet continued for several days. M. ANDRAL, jun., injected a quarter of a grain of this poison into the pleura of a rabbit; in two minutes it was seized with nausea, bent its fore legs, and fell on its side; the muscles of the extremities and face became agitated by convulsions, and it died in seventeen minutes. The same quantity of the crystalline matter was injected into the pleura of another rabbit; the animal was seized with violent convulsions, and died in five minutes.

It appears, from this comparative statement, that the active principle of the upas tieuté destroys life more rapidly than that of the upas antiar, and appears also to operate in a somewhat different manner. We have seen some experiments made with this poison on rabbits, by SIR ASTLEY COOPER; he introduced a bit of wood, which had been dipped in the extract of the upas tienté, beneath the skin, and the effects it produced were similar to those described by M. ANDRAL, jun., in his last experiments, but death followed more rapidly. We shall quote from SIR ASTLEY'S interesting lecture on poisons, from No. 6. Vol. III. of *The Lancet*, the following passage, with which we shall close the present article. "SIR ASTLEY introduced a minute portion of the poison within the cellular tissue of a rabbit, on which it soon produced its usual deadly effects. It appeared to suffer no pain, but at the expiration of three minutes its hinder extremities were paralysed; in three minutes and a half it appeared to be insensible, and at the end of four minutes it rolled on its back and died."

FOREIGN DEPARTMENT.

ANALYSIS OF FOREIGN MEDICAL JOURNALS.

ARCHIVES GENERALES, OCT. 1824.

Case of a double Uterus and Vagina, with some remarks on Superfetation. By M. A. L. CASSAN.

A woman, aged 30, died in August 1823, *à la Maison Royale de Santé*, in the wards of M. DUMERILL, having presented all the symptoms of phthisis pulmonalis. At the examination of the body, I was very much struck by a peculiar disposition of the peritoneum, which appeared to divide the uterus into two lobes. I then examined the external parts of generation, but there was nothing remarkable in their structure, the entrance of the vagina was large, and the hymen was destroyed; I could touch, easily, the orifice of the uterus with my finger. On separating the nymphæ a little, I found, about an inch above the orifice of the vagina, a partition which divided the canal vertically into a right and left passage; this partition was turned more towards the right side, and gave the vagina on the left a very remarkable enlargement. The length of each vagina was five inches. The partition was about a line in thickness, and was formed of a folding of the mucous membrane of each vagina; and, just in front of it, the vagina presented a considerable increase of its transverse diameter.

On the external surface of the uterus there appeared a fold of the peritoneum, very similar to the suspensory ligament of the liver, con-

taining the urachus on its anterior edge; it extended from the posterior surface of the bladder to the upper and fore part of the vagina, over the anterior and upper part of the uterus, then the posterior surface of the uterus, and terminated by being fixed to the anterior surface of the rectum. The surfaces of this fold of the peritoneum stretched themselves over the faces of each lobe of the uterus, and formed, by folding again, the large lateral ligaments of each uterus. It happened from this arrangement, that the lower part of the pelvis was divided into two cavities, one anterior, the other posterior, each of which was subdivided by the fold of the peritoneum before described passing from before backwards.

The body of the uterus was, in its transverse diameter, four inches and four-twelfths, and was formed of two oval lobes; a little flattened before and behind, and ten lines in thickness; each being about the size of an ordinary uterus, united only at their smaller extremity. The lateral surfaces were embraced by the large ligaments, and there was observed on each side a fimbriated tube and an ovary. The neck examined externally was quadrilateral, of five lines in diameter. On cutting through the neck and the body of each lobe of the uterus laterally, I discovered that the cavity of each was entire, and without any communication with that of the opposite side; each cavity was six lines in length and three in breadth, irregularly cylindrical, and presented two slight dilatations. The cavity of the neck was divided into two parts by a longitudinal partition, and communicated with the cavity of each lobe at right angles; this middle partition of the neck of the uterus was also formed by the doubling of distinct surfaces. Each cavity terminated in the vagina by an orifice of a line in diameter, but did not show the least rent or irregularity, as is often seen in women who have had many children.

It will be seen from this description that there were two distinct uteri, united only at their necks. The appendages of these organs were not double, but each ovary was surmounted by a cyst, which appeared developed in one of the vesicles, and which had acquired the size of a pigeon's egg; its sides were very thin and transparent, and its cavity was filled with a viscid fluid of the consistence of syrup. This formation of the uterus, although very rare in women, has been observed several times, and it is what authors have called the *uterus duplex*, *bicornis*, *bipartitus*, *bifidus*, *bilocularis*, *bisulcus*. It has great analogy to the natural structure of various kinds of animals, as in the hare, the rabbit, the beaver, the marmot; and in ruminating animals we have this structure naturally, as in the cow, the sheep, the doe, the goat; also in certain amphibious animals, and the cetacea.

When the uterus presents this formation, there can be no doubt but that superfetation is possible, as often happens in those animals which have a double uterus. It cannot be doubted that in a case like the present, where each uterus presented an identical organization, but that they should both have formed the menstrual secretion, could equally contain the product of conception and support its development. The distribution of the vessels on each side was the same; their number and size the same, and they were common to both uteri, therefore there is no reason why the nourishment of the fœtus should not be equal. It is probable also, that this peculiar formation of the uterus occurs in those females who have not the menstrual discharge intercepted during the progress of gestation, even up to the time of delivery.

A case of a double uterus was reported to the Society of the Ecole de Médecine at Paris, by M. CHAUSSIER:* The woman died in *La Maternité*, after having had twelve children, but superfetation never happened in her case, because there was only one ovarium and Fallopian tube. Professor TIEDMANN† has also given a case which he met with, in which the uterus was divided by a middle partition; but this woman died a few days after she had

* *Bulletins de la Fac. et de la Soc. de Médecine*, 1817, p. 437.

† *Journal Compl. du Dict.* tom 6. p. 371.

been delivered of a full-grown child. From these facts I think it appears certain that there might be a complete development of a fœtus in one of the lobes, and that a true superfetation might take place in the other lobe during the gestation of the first. Indeed I am indebted to Madame BOIVIN for the following case of superfetation, which I shall briefly relate.—A woman, aged 40, was delivered of a little child on the 15th of March 1810, which weighed about four pounds. As the abdomen continued of a large size after the delivery, Mdme. B. introduced her hand into the cavity of the uterus, but could discover nothing. On agitating the tumour slightly, by pressing on the abdomen, and by examining at the same time the neck of the uterus, it was found that the same motions were given to the neck which were made by the tumour; this circumstance induced Madame B. to think that there was either an extra uterine fetation, or that there was a double uterus containing another fœtus. On the 13th of the following May, she was delivered of a daughter, weighing about three pounds, but very feeble, discoloured, and who respired very little. It appears clear then, in this case, that the fact of superfetation had taken place.

Remarks on Phlegmasia Dolens, by M. VELPEAU.

This is a disease, says M. V., of which we have not a very correct knowledge, and yet it is rather strange that it should be so, as it is an affection which produces the most decided effects in the structures which it attacks. He considers that the theory which placed the seat of the disease in absorbent vessels solely, is erroneous; and then asks, But where are the cases of pathological anatomy, which show that the disease is primitively and invariably in the lymphatic system, rather than in any other? Before answering this question directly, I shall report three cases, which will show that the disease often arises from other causes than those usually assigned to it.

Three cases are detailed with great minuteness, in which the symptoms were such as are usually presented in this affection, they were treated by blood-letting, but not decisively; they had *sangsues, diete, tisan, lavement*, &c. and, as might be anticipated, they all died. In the dissection of the first case, the *crural vein* was found plugged up with adhesive matter and pus, its coats were very much thickened, and appeared red externally; a large quantity of pus was found in the iliac vein, and some pus was traced even into the right ventricle, and in the pulmonary artery. In the two other cases the sacro-iliac symphyses were found much inflamed, and the veins leading from the pelvis contained a large quantity of pus; the parietes of the vessels, or their lining membrane, did not present any of the effects of inflammation, and the fluid which they contained appeared rather to have been absorbed, than formed within them. The first case related by M. VELPEAU is certainly very much like the case which Dr. DAVIS has described, and goes to confirm the Doctor's opinion of the pathological condition, on which the affection called phlegmasia dolens is supposed by him to depend.

ITALIAN JOURNALS.

A curious case of closure of the Vagina in a woman aged 25; after she had been married seven years; by LOUIS VENTURA, M. C. D.

Angelique Mariglias, of the commune of Ofonto, aged twenty-five, was married about seven years since to Joseph Valentine, with whom she had always lived on good terms. She appeared to be of a good constitution, and came to consult me in September 1823 for a complaint for which she had for a long time employed various remedies, but without success.

She presented the following symptoms, she had great difficulty in making water, the alvine evacuations were painfully passed, attended with frequent spasms; a feeling of weight about the genitals, and pains came on several times in the course of the day

resembling those of labour. There was a considerable swelling of the abdomen, which appeared to be formed of two tumours placed one above the other. She assured me she never had her menses appear, and that the complaint had existed for many years. She told me also, that the size of her belly at first was about that of a seven months' pregnancy, that it had gone on gradually increasing; she added that she was getting thinner every day, and that she experienced such evils as rendered life insupportable.

To establish my diagnostic the better, and having carried my fore finger within the vulva, I thought, from what I felt then, that there was a prolapsus of the uterus; but as I could not introduce the finger any further within the vagina, or ascertain the situation of the os tincæ, I wished to inspect the parts, and to my very great surprize, after a marriage of seven years, I found that the hymen completely closed the orifice of the vagina. The hymen was stretched almost ready to burst, and behind it you could distinguish a large quantity of fluid, which became more evident when she stood up. The orifice of the urethra was forced towards the symphysis pubis, which explained the circumstance of the retention of which she complained. The clitoris was concealed, and there was not the least trace of the nymphæ.

After having evacuated the rectum by copious injections, in the presence of three of my colleagues, I made a crucial incision through the hymen: immediately that I had finished it, a torrent of blood gushed out, like tar in colour but rather thicker and without smell; in proportion as it flowed the abdominal tumour disappeared. The vagina, the neck of the uterus, and its cavity were distended very much, but were in a sound state. The cure was prompt and easy, eight days after the patient quitted the bed without having employed any other remedy than the use of a small bit of sponge. At the end of eighteen days, after having remained in a state of virginity all her life, although married seven years, the duties of the nuptial couch were performed without difficulty or inconvenience.

Storia medica di un caso raro d' idrofobia, con alcune reflessioni interno a questo male, del dottore LUIGI EMILIANI.

Remarkable Case of Hydrophobia, followed by Cure; with Remarks by DOCTOR EMILIANI.

THE following case appears to possess some interest, and serves to show, that the matter which ultimately produces the horrible symptoms of this disease remains for a certain time inactive in the wound, and that therefore the treatment to be adopted should be that of removing the bitten part without hesitation, even some time after the bite has been received. This is DOCTOR EMILIANI's opinion, in which, we believe, most will coincide.

Domenico Brezzi, a bleacher, father of a large family, kept, as a protection for his house during the night, a large dog, which in the day time was chained. A strange dog strolled one day into the yard, and bit the dog which was chained. About thirty days after, the symptoms of disease showed themselves, but no one suspected what would happen; when loosed from his chain one morning, he bit Brezzi, his son Benedetto, and a domestic named Marie Ospitali. Soon afterwards the animal refused all kinds of food and drink; the progress of the madness was surprising; he was continually biting what came in his way, and bit a piece of wood with such force, that was thrown into his cabin, that his teeth were broken off, and remained fixed in the wood; he soon afterwards died. The manner in which the dog died caused great inquietude in the minds of the persons bitten, as might be expected. They took a small quantity of powdered cantharides internally, and thought they had done all they could do to prevent any evil consequence. We visited Brezzi and his family six days after the bites had been made, and being made acquainted with the circumstances, pointed out the necessity of having the parts immediately cauterised, notwithstanding that they had healed. Brezzi and his son consented, but the servant would not, because she had been bitten just above the pubis. Pro-

FESSOR ATTI cauterised freely the wounds of the two former, and afterwards applied a blister, which was kept discharging for some days. Since that time Brezzi and his son have had no bad symptom; whilst the unfortunate servant was seized, on the twenty-seventh day, with symptoms of the disease, and died in a short time, in the most deplorable condition. The cure of the two others has remained firm, although it is now more than two years since the accident.

ST. BARTHOLOMEW'S HOSPITAL AND ITS DRESSERS.

To the Editor of THE LANCET.

SIR,—You have hitherto shown yourself the undaunted advocate of truth and justice; you have nobly stepped forward, and risked all, to uphold the cause you have pledged yourself to support; and, however the few who slander may disrelish your freedom of language and independence of conduct, rely upon it, Sir, *the medical world do fully appreciate your talent, integrity, and judgment.* You have professed a determination to watch over the interests of the Medical Students with a jealous eye. I am one; and I now call on you, Sir, to redeem your pledge. I entered as Dresser at Bartholomew's Hospital, and paid an additional fee in consideration of certain advantages I was to possess beyond the common class of students; these advantages consisted (I was given to understand) in having a certain number of patients entrusted to my especial care and attention. I was to visit them, examine and prescribe for them: this responsibility I felt proud of, and determined that nothing should be wanting, on my part, to deserve the confidence which this responsibility entailed; when, suddenly and secretly, even without the concurrence of the Hospital Surgeons, the Surgeons' books are removed from the wards, and the Dressers are told, that no order or prescription will be attended to at the Apothecary's shop, unless it come from the House Surgeons. This, Sir, I affirm to be unjust and dishonourable: it is an *ex post facto* regulation that picks the pocket of the Dressers, and robs them of the only stimulus to professional exertion; it deprives them of the pleasurable gratification of seeing all their care, anxiety, and attention rewarded by the restoration of the patients to health by their means; this, Sir, to me, is heart-rending. I have looked forward to my Dressership as the time when I should be enabled to put in practice those principles of my profession which I had been long acquiring. The solicitude I have ever felt for those patients entrusted to my care has been amply rewarded by their smile of gratitude on recovery; and this feeling to me is more valuable than the paltry sum thus iniquitously taken from me. To you I appeal, Sir, to expose the injurious nature of this regulation; to show how absurd, how impossible, it is for two House Surgeons to attend to *five hundred patients*, or even prescribe for them with the judgment necessary. House Surgeons have been rejected at the College; I mean no reflection on the present officers; they are men of gentlemanly feeling and professional talent, and I would shrink from saying any thing which might be construed into disrespect towards them; but I must protest against this breach of honour and justice. I, as one, shall most certainly express in plain terms my determination to resist such an abominable act of oppression. Requesting that you will give this letter a corner in your valuable publication, believe me to remain,

Your humble servant,
VERITAS.

St. Bartholomew's Hospital,
Nov. 21st, 1824.

PUPILS AND PATIENTS AT THE LONDON HOSPITAL.

To the Editor of THE LANCET.

SIR,—Having seen with pleasure the benefits which your inestimable LANCET has rendered to the Pupils of the Borough Hospitals, by its unre-

mitted attention to their interests, I have taken the liberty of laying before you some proceedings which have occurred at the London Hospital, not only for the sake of my friends who are now pupils in that Hospital, but also for those who may afterwards become pupils.

One of the rules for the pupils of the London Hospital is, that no one shall take in patients or become house pupil until he has attended there three months. For several years back this rule has not been at all attended to; some of the pupils having taken in patients before they had been at the hospital more than a month, and at that time there were not many pupils attending the hospital. This year there are between 60 and 70 pupils, and about 48 of these are junior pupils. The senior pupils wish to take advantage of this rule, and not allow the junior pupils to take in patients until they have been there three months. This was naturally opposed by the junior pupils, when the senior pupils called a meeting to consider how they ought to proceed; three of them were chosen, who were to wait on the surgeons and speak to them on the subject; they however got an undecisive answer from all of them. For several days the hospital was in the greatest confusion, when Sir W. BLIZARD politely stepped forward and said on account of the number of the junior pupils they *ought* to take in immediately, or after being at the hospital six weeks, one senior and one junior pupil weekly; however, still it remained unsettled, when to-day Mr. HEAD——N concluded by saying, that after all the senior pupils had *taken in twice*, then the junior pupils should take in, together with the senior pupils. Now, if this be the case, and there be above 40 junior pupils, and none of them take in before three months, and then only one weekly, the year will be expired before many of them have an opportunity of taking in; and besides, many of them have only entered for six months, and during this time the senior pupils will have all taken in at least four times.

Yours, &c.

ANICUS JUSTITIÆ.

Nov. 17th, 1824.

APOTHECARIES' ACT AND THE RIGHTS OF SURGEONS.

We take the account of the following Trial from *The Times* of Friday last. It was our intention to have published a few critical remarks respecting it, but we are at present too much engaged in the preparation of a *Chancery Mixture* for Mr. ABERNETHY to be enabled to do so. The profession, however, may rely on our giving the affair a pretty sharp investigation in the course of a week or two. A more cruel case, or one in which the Judge and Counsel were more completely in error, we have seldom seen.

COURT OF COMMON PLEAS,

Thursday, Dec. 2.

(*Before Lord Chief Justice* BEST *and a Common Jury.*)

STEED V. HENLEY.

Mr. *Adolphus*, jun., opened the pleadings. This was an action brought by the plaintiff to recover 11*l.* 10*s.* 6*d.* from the defendant, for work and labour done. The defendant pleaded the general issue.

Mr. Sergeant *Pell* stated the case to the Jury. From his statement it appeared, that the plaintiff is a surgeon, residing in Caroline-street, Bedford-square, and that the defendant is a lady of a certain age, living with her mother in Chalton-street, Somerstown. Between the months of November, 1823, and June, 1824, the defendant was in ill health, and applied to the plaintiff for his medical assistance. In consequence, he furnished her with sundry draughts and medicines, for which he was entitled, according to the usual charges of his profession, to demand 11*l.* 10*s.* 6*d.* of the defendant. Why she resisted this demand he could not tell.

The *Lord Chief Justice*.—Perhaps she has not recovered, and therefore she thinks that the plaintiff ought not to recover. (*A laugh.*)

Mr. Sergeant *Pell* replied, that she had recovered, and therefore that his client was entitled to recover also.

He could not be expected to prove the delivery of every precise draught and pill-box; but he would prove that physic had been furnished to her in large quantities; that she had admitted the delivery of it, when a bill of it was presented to her; that she had acknowledged herself to be indebted to the plaintiff in the amount of that bill, and that on various occasions she had promised to pay it. It was in consequence of her refusal to perform these promises, that the present action was brought to enforce them.

The delivery of the various medicines was proved by the plaintiff's servant-boy, as was also a promise by the defendant to pay the amount claimed for them.

Mr. Sergeant *Pell* said this was his case.

Mr. Sergeant *Wilde* reminded his learned friend, that the plaintiff's demand was for medicines furnished: he must therefore either prove that the plaintiff was licensed to practise as an apothecary by the Apothecaries' Company, or else that he had practised as such previously to the 5th of August, 1815.

Mr. Sergeant *Pell* said, that he was prepared with such proof.

A Mr. Goold was then placed in the box, but he merely proved that the plaintiff, in the year 1814, had prescribed once or twice for him and his family; but he took no fee for his prescription, and at that time did not keep any shop.

A diploma from the Surgeons' Company, authorizing the plaintiff to act as surgeon, was then put in. It was dated, August 6, 1813.

A Mr. Cummins was then called on his subpœna, but did not appear.

This being the case for the plaintiff, Mr. Sergeant *Wilde* submitted, that the plaintiff must be nonsuited. It was true that the plaintiff was a regularly admitted surgeon: but this action was brought by him to recover medicines furnished to the defendant as an apothecary, and not for any thing done by him as a surgeon. Now the statute 55 Geo. III. cap. 194, section 21, enacted, that no person should recover for any medicines furnished by him, unless he proved that he was practising as an apothecary on or before the 5th of August 1815, or produced a certificate of his admission into their body from the Master and Warden of the Apothecaries' Company. Now, there was no evidence to show that the plaintiff had practised as an apothecary previously to the day stated in the Act of Parliament and a surgeon's diploma could not, and did not, authorize him to act as an apothecary.

Mr. Sergeant *Pell* submitted, that there was evidence to go to the Jury, that the plaintiff had practised as an apothecary on or before the day mentioned in the Act of Parliament.

The Lord Chief Justice *Best* was of opinion, that there was no evidence as to the plaintiff's practice as an apothecary before 1815. The Act of Parliament to which reference had been made was a most excellent one, and was the best security that the public had against ignorant persons acting as apothecaries, without being duly qualified. A person in passing through life could not fail to know that surgeons did practise as apothecaries; but after that Act, they had no authority to do so. To practise as apothecaries, they must be examined by five persons, named in the Act, and must obtain a certificate from them stating their approval. Now, the plaintiff had not undergone this examination; he therefore could not produce the certificate required; and as he had not, in his opinion, proved his practice as an apothecary before 1815, it appeared to his Lordship that he must be called.

Mr. Sergeant *Pell* submitted that his client, though he could not recover for the physic in this action, could recover for the phials containing it, which had been sent to the defendant.

The *Lord Chief Justice* thought that he could not. If a party chose to act as an apothecary, contrary to law, and to deliver phials in consequence of such choice, he was of opinion that he could not recover for them. If the law directed that a person should not do a certain thing, it would not allow him to recover for any thing which he might have done in his endeavours to perform that which the law prohibited. The plaintiff was acting in defiance of the law in practising as an apothecary without a certificate; he could not, therefore, have the melancholy

satisfaction of even recovering for the bottles which he had furnished to the defendant.

The plaintiff was nonsuited. In ordering him to be called, the *Lord Chief Justice* observed, that he ought to say that the present was a hard case, as the plaintiff appeared to be a person of skill, having been regularly admitted to the Royal College of Surgeons.

PARISIAN MEDICAL SCHOOL.

It may be interesting to many of our readers, to be informed who the principal lecturers are on professional subjects at Paris, we shall therefore furnish them with the following account.

The *Faculté de médecine* commenced their winter course of lectures in the early part of last month.

Chemistry. M. ORFILA; Monday. Wednesday, and Friday, at half-past ten in the Morning.

Anatomy. M. BECLARD; Tuesday, Thursday, and Saturday, at half-past ten.

Physiology. M. DUMERIL; Monday, Wednesday, and Friday, at noon.

Medical Pathology. M. FIZEAU; Tuesday, Thursday, and Saturday, at three.

Surgical Pathology. M. ROUX; Monday, Wednesday and Friday, at three.

Operations and Dressings. M. RICHERAND; Tuesday, Thursday, and Saturday, at three.

*Cliniques.** Every day, from six to ten in the Morning. *Clinique Medicale:* Rue des Saints Peres; MM. LANDRE, BEAUVAIS, RECAMIER, LAENNEC, and CAYOL, three months each. *Clinique Chirurgicale:* MM. BOYER, DUPUYTREN, and BOUGON; the first at La Charité; the second at the Hôtel Dieu; and the third at the Rue de l' Observance. These are continued all the year, excepting during ne vacations. *Clinique d' Accouchmens;* M. DINEUX, à la Bourbe.

There are many other courses of Lectures, on the same and different subjects, by eminent professors, during the winter months.

* The term *Clinique* is used to express that attendance on the different institutions, and that observance of the treatment adopted in them, for which we technically employ the term *Hospital Practice.* ED. L.

Another Case of Poisoning of a Family by Mushrooms.

THE following melancholy occurrence has recently happened in the South of France.

On Sunday, the 17th of October last, an entire family was poisoned by having eaten of some mushrooms which they had themselves gathered. The mother, aged 45, and her son, aged nine years, died on the following Tuesday, in the most horrible sufferings. Two of her daughters, the one aged 18, the other 22 years, died on the evenings of Thursday and Friday. Only one person of the family escaped, and that with the most violent pains. This fresh example should furnish an additional caution to the people of the country, against eating poisonous mushrooms. From the numerous cases which have occurred, it is to be feared that this will not be the last. Persons should be extremely cautious to distinguish the poisonous fungi, as the use of them is attended with such dreadful consequences.

HOSPITAL REPORTS.

GUY'S HOSPITAL.

Case of Rupture of the Vena Porta, from a fall.

C. D. a stout robust man was brought into Accident Ward of this Hospital, December 1st, complaining of great prostration of strength; he said that he had fallen with a load on his back, and was very much injured.

On making further inquiries, it appeared that he was carrying a piece of timber on his back and that he had fallen over a step, and the weight falling on him had very much crushed him. His countenance was pale, his pulse weak, and his skin cold. He came in

a little after seven in the evening, two hours after the accident had been received; his belly became very much distended; he sunk gradually and about eight o'clock he died.

An examination of the body took place the same evening in the presence of SIR ASTLEY COOPER, Mr. KEY, and a great many of the pupils. On laying open the abdomen, which was very much distended, an immense quantity of dark-coloured blood issued forth; all the intestines between the different viscera were filled with a fluid gore, evidently showing that some large vessel had given way. It was conjectured that it must have been the inferior cava, but, on minute examination, it was found that there was an opening, a lacerated opening, in the *vena portæ*, about the size of a small quill, just before that vessel enters the porta of the liver. The ribs were not fractured nor were any of the thoracic or other viscera injured. The hæmorrhage must have commenced at the time the injury was received, but from the small size of the opening, the hæmorrhage occurred gradually, and in two hours and three quarters after the shock had been received he sunk.

In our foreign intelligence of last week a case of rupture of the splenic vein from a kick on the abdomen was given; but the hæmorrhage that occurred then appeared to follow rather as the remote than the immediate effect of the injury.

No operations have been performed here or at St. Thomas's Hospital, this week of importance.

MIDDLESEX HOSPITAL.

THE following case is anomalous and although, perhaps, somewhat inexplicable, may still be deserving the attention of our readers. The opening symptoms would, we think, have justified the conclusion, that some important viscus (the liver, for instance) had been ruptured. Whatever be the precise nature of the injury, the symptoms of the case are here faithfully recorded.

Sept. 9th.—Wm. Fairchild, a boy æt. 12, admitted about six p. m. He had been knocked down by a cart, the wheels of which, it was said, had passed over the belly. On being placed in bed, and examined, his symptoms were as follows: his pulse was 58, very weak and intermitting; he was tolerably sensible, and complained of a violent pain over the floating ribs. After a short time his countenance became livid, his respiration difficult and oppressed; the pulse, however, was still unaltered. On his first admission he was ordered:

Enema commune statim—et applicantur Hirudines xii. *abdomini.*

He afterwards had:

℞. *Mist. Camphoræ*
Infus. Sennæ, aa. ʒvi.
Magnesiæ Sulphatis. ʒii. *statim.*

10th. His bowels had not been open. There was great tenderness of the abdomen, which was frequently fomented. Tongue furred. Pulse quick, rather full, 104, and intermitting. He was ordered to have the following:

℞. *Ol. Ricini*, ʒii.
Infus. Sennæ, ʒviii.
Sulph. Magnesiæ, ʒii.
Aquæ Hordei, ʒvi. *fiat Enema.*

Et Capiatur.

Calomelanos, gr. j.
Ext. Colocynth Co. gr. vi.
Conf. Opiat. q. s.
Fiant. pilulæ statim sumendæ, et repetendæ post horas quatuor si opus fuerit.

Afterwards he had an indifferent stool, and the enema was repeated in the evening; pills also repeated.

Et Capiatur—Haust. Tart. Sodæ p. r. n.

11. Passed a restless night, with great pain and tenderness of the epigastric region, and vomited twice a stercoraceous matter. This morning there is great pain and tenderness of the abdomen, which is also tense. His bowels have *not* been well opened by the pills and enemeta exhibited; his skin is hot and dry; tongue furred; respiration difficult, oppressed, and hurried; pulse wiry and intermitting, about 110.

Mr. JOBERNS ordered—

V. S. ad ʒxvi.
Emp. cantharidis pectori, et enema c immune statim.

12. Respiration difficult; pain in the abdomen diminished; bowels open last night; pulse about 100, rather full. Since his admission, has made water with great difficulty; has occasionally taken linseed tea; this morning, however, he voided a pint of urine.

Capiatur—Haust. Tart. sodæ p. r. n. ut. hori.

℞. *Ext. Colocynthidis comp.* gr. vi.
Hydrargyri submuriatis, gr. ii.
saponis gr. vi. a. s. *fiat pil.* ii.
Statim et post 4tas horas repetendæ si opus sit.

13. Pulse about 100, jerking; respiration less difficult; bowels not open since yesterday; pain in the abdomen much less. He now, however, complains of pain under the inferior angle of the right scapula; tongue furred.

Capiatur.
Magnes. sulph. ℥iii.
Ex. Aq. menthæ vind. ℥i. *statim.*

14. Bowels open; skin more natural; has no pain in the abdomen, but still complains of pain over the shoulder and clavicle of the right side; tongue tolerably clean; pulse 85; makes water freely.

15th. Pulse 100, jerking; respiration difficult; bowels open, and makes water freely; skin hot and dry; tongue furred; pain in the shoulder diminished.

App. Emp. Cantharidis sterno et Capiatur Haust. Tart. sodæ ut antea.

16. Bowels open last night; not open to-day; difficulty of lying on either side; skin hot; respiration best on the back; makes water freely. Pergat medicaminibus.

19. Pulse 80, weak; bowels open twice. Complained yesterday and to-day of pain over the spine of the ilium on the left side. Tongue rather furred; skin hot; respiration rather difficult. Yesterday he had *decoct. aloes co.* ℥j. *statim.*

20. To-day he is rather better; slept well last night; respiration more free; bowels open. On coughing or turning suddenly, feels a pain in his left side. Pain over the spine of the ilium diminished. Pergat medicaminibus.

22. Pulse about 60, rather irregular; skin more natural; bowels open; little or no pain in the side.

25. Pulse still small and irregular, about 50; in other respects the same.

From this period he had no bad symptoms.

Case of sloughing of the extensor tendons of the Fingers, followed by Locked Jaw.

Wm. Waddington, a healthy muscular man, æt. 42, admitted Oct. 29th, with a deep wound across the back of the three first fingers, produced by a rough-edged instrument. The parts were brought together by adhesive plaster, and secured in the ordinary way by a roller.

Nov. 2. Hand much swollen; tongue furred; skin hot and dry; pulse frequent. The wound has not united, is dark and unhealthy, and apparently disposed to slough. Ordered a poultice, and the peruvian dressing, and a purge in the morning.

5th. Swelling on the back of the hand considerably increased, and sloughing of the integuments of the index finger. A linseed poultice, made with the liq. plumbi acetatis dilutus, and opium, was ordered to be applied, and calomel gr. ii. opii gr. ss. to be given him at bed-time, and in the morning Haust. sennæ co. ℥ii.

7th. Back of the hand of a livid colour; erysipelatous inflammation spreading up the arm to the shoulder. In the more tumid part of the hand a fluctuation may be noticed. Pulse 100.

8th. The inflammation is much less, the hand is more livid, and the fluctuation more distinct; pulse 90. A lotion, made with spirits of wine, liquor. ammoniæ acetatis, and water, was ordered to be applied to the arm and shoulder, and a dose of house medicine to be given the patient.

9th. The abscess on the back of the hand was opened, and a copious discharge of good pus ensued. Integuments covering the finger insensible to touch. The arm, however, is less swollen; ordered Haust. sennæ co. statim.

10th. Inflammation much reduced. The whole of the integuments covering the abscess (which were sphacelated) removed, and much pus discharged; by this operation the extensor tendons were exposed. The pulse is 120, and full; tongue furred; skin hot and dry.

Mr. BELL ordered him the following pills:

℞. *Extract. Cinchonæ*, gr. iii.
Ammoniæ Subcarbonatis, gr. ij ss.
Opii gr. ss. *fiat pilula 3tiis horis sumenda.*

Et Capiatur.
Ext. Colocynth. Co. gr. x. h. s.

11th. We find, from the nurse, that the pills were omitted during the night; the heat of skin, and the feverish restlessness having been much increased by their exhibition.

13. The granulations are scarlet, the surface is clean, and good pus is secreted.

Capiatur—Extracti Cinchonæ, gr. x. *et Vini Rubri*, ℥j. *quartis horis.*

15th. The wound has lost something of its former healthy character, and the discharge has considerably diminished. The patient complains of an uneasy sensation at the root of the tongue, the usual motions of which are not now performed with the former facility. He swallows solids with great difficulty; stiffness at the angles of the jaws. A lotion of the nitrate of silver, in the proportion of a grain to an ounce of water, was ordered to be applied to the wound, and four grains of calomel to be given him at night.

16. Pulse natural; tongue moist; the mouth more closed than yesterday; no pain in the head or neck; bowels open; urine good. Ordered, lint dipped in tr. opii to the wound.

℞. *Opii*, gr. ii.
Camphoræ, gr. iss.—*fiat pilula—ter die sumenda.*

Et Capiantur.
Vini rubri, ℥vi. *quotidie.*

A small quantity of the following ointment was likewise ordered to be rubbed on his throat at bed-time.

℞. *Ung. tabaci.*
Hyd. fort. aa. ℥iv.—*fiat unguentum.*

17. Difficulty of swallowing much increased; pulse 100, and full; profuse sweats; stiffness at the back of the neck; a wedge is placed between the teeth to prevent their near approach. To-day Dr. MACMICHAEL was called to the patient, and ordered the pills to be given him every two hours, and a drachm of the ointment to be rubbed on the throat night and morning. Slime and scybala followed an enema to-day.

18. Slight convulsive twitching o the muscles, and somnolency; pulse 110, and vibrating; incapacity of swallowing, with considerable agitation and cough on its being attempted; no power of exposing even the tip of his tongue. Same treatment. He was afterwards ordered tr. opii ℥i. omni horâ, and the wound to be dressed with ext. belladonnæ.

19. Pulse 133; countenance clouded with anxiety and distress. The muscles of the abdomen are rigid, tense, and occasionally violently affected with spasm. His articulation is good, and the motions of the tongue within the mouth are not much impaired; he seems, however, to exercise extreme caution in thrusting it beyond the teeth. His attention being attracted, produces convulsive action. He is easier when up, and leans at a considerable angle over a small table, and on the approach of the paroxysm he presses the muscles of the abdomen against it to afford relief. He complains of occasional spasms, originating over the false ribs of the left side and reaching the root of the tongue. He clears his mouth of the saliva with difficulty, but is assisted in this action by diluting it with beef tea. The cold affusion and submersion were employed, but he died the next day.

Inspectio Cadaveris.

The tendons of the extensor muscles, situate in the abscess, were completely destroyed, and the matter had separated and insinuated itself between the muscles on the back of the fore-arm to some distance above the wrist. The branch of the median nerve going to the fore finger was completely destroyed, and the contiguous branches of others were inflamed. The pia mater was more than usually vascular.

ST. THOMAS'S HOSPITAL.

Post Mortem Examination of the case of Fungoid Testicle, reported at p. 287.

When the testis was laid open, its natural structure appeared to be destroyed; the greatest part of the

swelling was made up of unorganised coagulable lymph, in which were many small cavities containing a serous fluid. In one or two of them only was there any fungous matter found, so that the disease might be said to be in its first stage. The tumour in the inguinal canal was found to contain a pulpy material, like cream in consistency, and streaked with blood. The lumbar glands were not affected. The lungs were studded with tubercles on their exterior surface, about the size of marbles, which, when laid open, were found to contain just the same matter as was found in the inguinal tumour. More than three pints of serum were found in the chest. The abdominal viscera appeared healthy.

We have in this case an example of the true fungoid disease of the testicle, peculiarly hard at its commencement, but not quite so much so as scirrhus; rapid in its progress, effecting the complete disorganization of the testicle in a few weeks, although death appeared to have been caused by the inflammation excited in the lungs from the irritation of the tubercles; the scrotum purple in appearance, and the general health broken up. The disease having extended itself to the inguinal glands, excluded the chance of any benefit being derived from the operation. The inflammation in the testicle appeared first to have been of a common kind, but it is probable that the state of the general health caused that which was at its commencement common inflammation to degenerate into that of a malignant character. The reason why the testicle had not the pulpy feel usually considered as one of the marks of the fungoid disease is, that the patient was carried off by inflammation of the chest, whilst the disease of the testicle was in its first stage.

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